REMARKS/ARGUMENTS

Claim 1 and 3-11 remain pending. Claims 1 and 3 have been amended.

Claim Amendments

In order to advance prosecution of this application, Applicants have taken this opportunity to amend claim 1 to further clarify the claimed subject matter.

Specifically, the functions of the input mode selector have been clarified. Accordingly, the input mode selector is configured to:

(i) receive, from one of the at least two applications, a signal indicative of a default active input mode automatically in response to execution of the one of the at least two applications; and

(ii) determine an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode.

In addition, the functions of the backlight controller have also been clarified. Accordingly, the backlight controller is configured to:

(i) receive a signal indicative of the active input mode from the input mode selector; and

(ii) responsive to the signal indicative of the active input mode provided by the input mode selector, control at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys, the illuminated indicia defining an active portion of the keyboard of the mobile device.

Support for the amendments exists at least at paragraph [0021] of the original specification. Paragraph [0021] of the original specification recites (emphasis added):

> [0021] Thus, in response to a number of factors, which may include the application executed by mobile device 100, and user–defined input received through keyboard 104, input mode selector 120 determines an active mode and provides backlight controller 122 with indication of the

> active mode. The communication between input mode selector 120 and backlight controller 122 can be facilitated by a number of known techniques, including the use of a direct communication line for transmitting an encoded signal indicating the selected active mode, and the use of predetermined registers to indicate one of a number of predetermined active modes.

Furthermore, paragraph [0022] of the original specification recites (emphasis added):

> [0022] Upon receipt of the active mode from input mode selector 120, backlight controller 122 controls light source 124 to selectively illuminate keyboard 104. In a first embodiment, corresponding to Figure 2, upon receiving indication that the active input mode is a numeric mode, backlight controller 122 activates a set of backlights under the portion of keyboard 104 corresponding to the numeric portion, illustrated as 110 in Figure 2. Upon receipt of an indication that the active input mode is the full keyboard mode, backlight controller 122 activates all the backlights behind keyboard 104.

Claim 3 has been amended for consistency in the claim language.

Telephone Interview

A telephonic interview with Examiner Hung Q. Dang and SPE Albert K. Wong was conducted on January 12, 2011. Applicants' representative, Mukundan Chakrapani, was the only other participant in this interview.

Independent claim 1 was discussed during the interview. The following prior art references, cited in the Office Action dated October 12, 2010, were discussed during the interview:

> US Patent 5,408,060 (Muurinen)
> US Patent Application Publication 2002/0054676 (Zhao et al)

No agreement was reached.

An Applicants' Interview Summary was filed on January 19, 2011. The Examiner provided an Interview Summary on February 1, 2011.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 1, 3-7 and 9-11 as unpatentable over U.S. Patent No. 5,408,060 to Muurinen (hereinafter "Muurinen") in view of commonly assigned U.S. Publication No. 2002/0054676 to Zhao, et al. (hereinafter "Zhao"). The Examiner has rejected claim 8 as unpatentable over Muurinen in view of Zhao and in further view of U.S. Patent No. 6,693,272 to Adachi.

Applicants respectfully request the reconsideration of the rejections having regard to the amendments to claim 1 and to the following remarks.

1) Lack of *prima facie* case for rejecting claim 1, 3-11

Applicants submit that Muurinen and Zhao, either alone or in combination fail to teach all the claimed features of independent claim 1, and thus there is a lack of *prima facie* case for rejecting independent claim 1 and its respective dependent claims 3-11.

As claimed in claim 1, the input mode selector is configured to:

(i) receive, from one of the at least two applications, a signal indicative of a default active input mode automatically in response to execution of the one of the at least two applications; and

(ii) determine an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode.

Furthermore, as claimed in claim 1, the backlight controller is configured to:

(i) receive a signal indicative of the active input mode from the input mode selector; and

(ii) responsive to the signal indicative of the active input mode provided by the input mode selector, control at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys, the illuminated indicia defining an active portion of the keyboard of the mobile device.

Applicant submits that, Muurinen or Zhao, alone or in combination, do not teach or suggest an input mode selector or a backlight controller having any of the above features.

The Examiner has long agreed that Muurinen does not teach an input mode selector that receives, from one of at least two applications, a signal indicative of a default active input mode automatically in response to execution of the one of the at least two applications, as recited in claim 1. See for example, Office Action dated July 3, 2007 at page 2; Office Action dated April 4, 2008, page 2; Office Action dated 3 November 2008, at page 4; Office Action dated March 12, 2009, at page 3; Office Action dated September 21, 2009 at page 1; Office Action dated April 16, 2010 at page 11; and Office Action dated October 12, 2010 at page 10.

The mode of operation of the pushbuttons (keys) of Muurinen is changed using the pushbutton 16 (FCN), which is clearly a manual, user-initiated operation. The pushbutton 16 (FCN) does not receive any signal, let alone from one of at least two application, indicative of a default active input mode automatically in response to execution of the one of the at least two applications, as claimed in claim 1.

The pushbutton 16 does not determine an active input mode of the keyboard of the mobile device in accordance with the received signal indicative of the default active input mode, simply because it is not capable of receiving any signals at all, let alone making a determination as a result of receiving a signal.

In contrast, upon user actuation, the pushbutton 16 of Muurinen simply toggles the mode of operation of the phone and changes the illumination of the keys to correspond to the current function of each pushbutton.

Muurinen does not contemplate automatically controlling the illumination of the keyboard in response to the execution of an application. In fact, Muurinen teaches that the symbol denoting “the mode of operation which is not in use or which will be next in succession” will be illuminated to indicate “clearly the change in the mode of operation to be implemented by the subsequent use of the function key" (see Muurinen at column 4, lines 60-64). Thus, it is evident that the pushbutton key 16 is a toggle switch.

The Examiner, in the Telephone Interview on January 12, 2011, asserted that "the functional key (FCN 16) of Muurinen is not a toggle switch," but " a mode selector." Applicants submit that, while the functional key (FCN 16) may change the mode of operation of a device, it is nevertheless a user-actuated pushbutton key that changes the mode of operation of the pushbuttons only upon user intervention. In that sense, it acts as a toggle switch to cycle through the different modes of operation of the device as shown above.

The Examiner contends that this manual pushbutton 16, can be substituted by the teaching of Zhao. According to the Examiner, Zhao teaches a mobile device having an "input mode selector for (**automatic**) **receiving from one of the at least two applications**, a signal indicative of a default active input mode **in response to execution of the one of the at least two applications** and **for determining an active input mode of the keyboard** of the mobile device in accordance with the received signal indicative of the default active input mode" (emphasis in original, see Office Action dated October 12, 2010 at page 10).

As previously submitted, analysis of the portions of Zhao upon which the Examiner relies shows that claim elements in question are absent. The Examiner relies on paragraphs [0020], [0022], [0029] and [0032] of Zhao as describing an input mode selector. Zhao describes that "the mode of operation (data, telephony or joint) for the multifunctional keyboard 51 is preferably determined by the keyboard mode control software module 54 […] the keyboard mode control software 54 will preferably automatically set the multifunctional keyboard 51 to a preferred mode", thereby controlling the conversion of the unique input signal from the letter keys of the multifunctional keyboard into character codes or telephony tone signals based on the mode of operation of the device (see paragraph [0029] of Zhao et al).

Furthermore, paragraph [0034] of Zhao describes that "once an operation mode (an possibly one of the letter or number entry modes) for the multifunctional keyboard 51 has been selected, either automatically or by a user, the keyboard mode control software module 54 instructs the processor to convert the keyboard output signals to telephony tone signals and/or character codes" (emphasis added).

Thus, the keyboard control software of Zhao assigns functionality to multifunctional keys based on the mode of operation of the device by determining whether to convert the input signal from a key into a character code or into telephony signals based on the mode of operation.

Zhao does not teach or suggest that the keyboard control software, which interprets the functionality of multifunctional keys, can be used for providing a signal to a backlight controller for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys as claimed in claim 1.

The Examiner asserted that a person of ordinary skill in the art would have combined Muurinen and Zhao “so that explicit or manual mode selection of said mobile device can be alternatively substituted by said (automatic) mode selection” (see Office Action dated October 12, 2010 at page 11).

Applicants submit that substituting the pushbutton key 16 (FCN) of Muurinen with the keyboard control software of Zhao will, at best, result in the automatic interpretation of the functionality of keys in Muurinen based on the mode of operation of the device. Nothing in the two references teaches or suggests that the keyboard control software (i.e. the automatic input mode selector) will provide a signal to a backlight controller for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys as claimed in claim 1.

Thus, combination of Muurinen and Zhao as proposed by the Examiner will not and cannot provide the input mode selector as claimed in amended claim 1 that receives a signal indicative of a default active input mode automatically in response to execution of the one of the at least two applications and provides this signal to a backlight controller for selectively illuminating one of the at least two pre-existing indicia on the keys.

As evident from the above discussion, the substitution suggested by the Examiner would change the principle of operation of the prior art invention being modified. MPEP 2143.01 (VI) (“If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)…").

Thus, Muurinen and Zhao, either alone or in combination, fail to teach all the claimed features of independent claim 1, and thus there is a lack of *prima facie* case for rejecting independent claim 1 and its respective dependent claims 3-11.

2) The rejections omit essential elements for a *prima facie* rejection

In his response to the arguments presented in the response dated August 16, 2010, the Examiner, in the Office Action dated October 12, 2010, merely restated his position with respect to the Muurinen and Zhao. Furthermore, the Examiner simply repeated his rationale for rejecting the claims from Office Action dated April 16, 2010 in the Office Action dated October 12, 2010. The Examiner failed to substantiate: (i) how the manual input mode selector of Muurinen can be modified to an input mode selector as claimed; (ii) how the backlight controller of Muurinen is responsive to an active input mode, the active input mode being determined in accordance with the received signal indicative of the default active input mode and provided by the input mode selector and (iii) how Zhao teaches an input mode selector which provides an signal indicative of a default active input mode to a backlight controller for controlling at least one light source to selectively illuminate one of the at least two pre-existing indicia on the plurality of keys.

Thus, the Examiner has omitted essential elements or functionality of the claimed input mode selector and backlight controller and hence fails to sustain a *prima facie* rejection.

3) Clear errors in rejections

Applicants reiterate the position that the Examiner has rejected the pending claims erroneously and without basis in fact or in established jurisprudence.

For at least the reasons stated above, the cited references do not teach or suggest all the limitations of independent claim 1. The Examiner's purported impetus for the combination of elements from the disparate references was to provide for "automatic mode selection."

Muurinen teaches only manual mode selection, or mode selection by an user using a pushbutton, which can only send a signal and cannot receive any signals. An input mode selector that receives a signal indicative of active input mode is not mentioned anywhere in Muurinen.

The Examiner, in the Office Action dated October 12, 2010 (and also in the Office Action dated April 16, 2010) states that both Muurinen and Zhao "pertain to entry of data in a communication device (phone) which involve entry of numbers and characters on keys; and Muurinen teaches the problem of having two indicia on keys of phone device and uses the illumination of portions of the keys to solve the problems."

Applicants respectfully submit that Muurinen deals with illumination of keys with multiple indicia, while Zhao deals with assigning functionality to the keys of a multifunctional keyboard. The two references do not teach or suggest "the solution to the same problem" as asserted by the Examiner (see Office Action dated October 12,2010 at page 11).

The Examiner merely provides conclusory statements that it would have been obvious to one of ordinary skill in the art to "alternatively provide to the mobile device of Muurinen an (automatic) input mode selector […] as suggested by Zhao et al" (see Office Action dated October 12, 2010 at page 11).

Thus, the only plausible reason for a person to attempt a combination of Muurinen and Zhao would be to take the device as claimed in claim 1 as a blueprint for piecing together Muurinen and Zhao to defeat the patentability of the device as claimed in claim 1. In other words, in the absence of evidence to the contrary, the Examiner has improperly used the Applicants' own teachings against the Applicants. *In re Oetiker*, 24 USPQ2d at 1446 ("That knowledge [referring to the impetus to combine elements from various references] cannot come from the applicant's invention itself."); *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (Taking the inventor's disclosure "as a blueprint for piecing together the prior art to defeat patentability [is] the essence of hindsight.").

Conclusion

Applicants submit that Office Action dated October 12, 2010, clearly fails to demonstrate a *prima facie* case of obviousness for any of the pending claims and the rejections omit essential elements for a *prima facie* rejection; and there are clear errors in the rejections. We respectfully request withdrawal of the pending rejections and early allowance of this application.

The Commissioner is hereby authorized to charge any additional fees, and credit any over payments to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

Respectfully submitted,

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